



ORIENTAL INSTITUTE OF SCIENCE AND TECHNOLOGY

A UNIT OF ORIENTAL ASSOCIATION FOR EDUCATION AND RESEARCH

M.Sc. BIOTECHNOLOGY & M.Sc. BIOCHEMISTRY, AFFILIATED TO VIDYASAGAR UNIVERSITY

Ref. No.

Date

Dr. Bidyut Bandyopadhyay
Associate Professor and Head
Department of Biotechnology

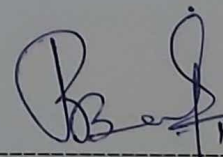
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Burdwan
October, 13, 2020

: CERTIFICATE :

This is to certify that the thesis entitled "Role of probiotics as a therapeutic tool on gastrointestinal diseases in mice and study of intestinal immunomodulation" submitted by Atrayee Roy for the award of the Degree of Doctor of Philosophy in Biochemistry, Faculty of Science, Vidyasagar University, is a record of faithful and bonafide research work carried out under the joint supervision and guidance of myself and Dr. Madhumita Maitra. The thesis has reached the standard of fulfilling the requirements of the regulations relating to the Ph. D. degree of Vidyasagar University. The results embodied in this thesis have not been submitted for any other Degree or Diploma.

The assistance and help received during the course of investigation have been duly acknowledged.


13/10/2020

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CERTIFICATE

This is to certify that the thesis entitled "Role of probiotics as a therapeutic tool on gastrointestinal diseases in mice and study of intestinal immunomodulation" submitted by Atrayee Roy for the award of PhD degree in Biotechnology, Faculty of Science, Vidyasagar University, is the record of bonafide investigation carried out and completed by her under joint supervision and guidance of Dr. B. Bandyopadhyay and myself. She has followed the rules and regulations as laid down by the University (Ph.D regulation 2009). The results are original and have not been submitted anywhere for any other Degree Diploma. The assistance, help and sources of information availed during the course of the investigation have been duly acknowledged.

Yours sincerely,

Dr. Madhumita Maitra

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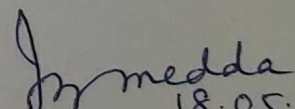
Dated: 18.05.2017

TO WHOM IT MAY CONCERN

This is to certify that a meeting of the Institutional Animal Ethical Committee was held on 18.05.2017 at 2 P.M. at the Board Room of the Oriental Institute of Science and Technology (OIST) to consider and issue the letter of ethical clearance in favor of the project proposal "**Role of probiotics as a therapeutic tool on gastrointestinal diseases in rats and study of intestinal immunomodulation**" submitted by **Atrayee Roy**, Department of Biochemistry, OIST.

The committee unanimously approved the above mentioned proposal and recommended it for submission to Ph.D. Thesis.

Relevant portion of the minutes of the meeting of Institutional Ethical Committee is enclosed.


18.05.2017
(Dr. J.B. Medda)

Secretary and Principal

Oriental Institute of Science and Technology

Oriental Institute of
Science and Technology